

Ser. No. 09/614,635

REMARKS

1. Applicant thanks the Examiner for his generous assistance, provided during a telephone interview on March 21, 2006. The first matter for discussion was the present rejection of claim 1 under 35 U.S.C. 112, first paragraph. Applicant asked the Examiner to explain his finding that the addition of the term "dynamic" was unsupported by the specification. Applicant pointed to additional support for the change in the specification. Applicant also provided additional evidence of the commonly understood meaning of the term "dynamic" in the software arts. The Examiner expressed the view that the term was "too broad."

The next matter discussed was the rejection of claim 1 under 35 U.S.C. § 102(b) as being anticipated by Aho. Applicant pointed out to the Examiner that the second clause of claim 1 clearly describes a multi-media processing program, which includes the abstract routine generator described in clause 3, and that claim 1 as it presently stands is distinguished from both Aho and Benson. Applicant stated, however, that it is willing to amend the independent claims to describe the relationship of the two components in greater detail. The interview concluded with the Examiner's recommendation that Applicant amend the independent claims to describe the invention more clearly and to provide arguments in support of the amendments.

1. 35 U.S.C. § 112, 1st ¶.

Claims 1-8 and 10-21 stand rejected under 35 U.S.C. § 112, 1st paragraph as failing to comply with the written description requirement because the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventor had possession of the claimed invention at the time the application was filed. More particularly, the Examiner found that the originally filed disclosure does not support dynamic generation as claimed or through the general meaning of the specification. Applicant respectfully disagrees. The Examiner explained that the term dynamic was excessively broad, because all software programs, by their natures, are dynamic. Applicant respectfully disagrees with the Examiner's

Ser. No. 09/614,635

reasoning. Within the software art, "dynamic" is a term of art having a reasonably specific meaning. Below, Applicant first provides evidence of what the term "dynamically generating" would mean to the ordinarily-skilled practitioner in the software arts.

In the computer arts, "dynamic" is commonly understood to mean "pertaining to events occurring at run time, or during processing" or "pertaining to an operation that occurs at a time that it is needed, rather than at a predetermined or at a fixed time." IBM Dictionary of Computing, p.224, McGraw-Hill (1994). "Dynamic" refers to actions that take place at the moment they are needed rather than in advance. <http://www.webopedia.com/TERM/d/dynamic.html> (March 21, 2006).

Before amendment, the Application was originally titled "On the fly generation of multimedia code for image processing." Furthermore, the specification contains the term "on-the-fly" at page 5, line 24 - ". . . or to generate routines on the fly depending on user interaction." In the computer arts, the term "on-the-fly" describes activities that "develop or occur dynamically rather than as the result of something that is statically predefined (en.wikipedia.org/wiki/On-the-fly, March 21, 2006)." Thus, "on-the-fly" code generation is synonymous with "dynamic code generation."

At page 5, lines 21-22, the application describes "[t]he abstract routine generator generates an abstract representation of the code, commonly in the form of a directed acyclic graph during runtime (emphasis and brackets added)." At page 7, line 6-7, the specification describes [t]his enables the translation to be
5 executed at program startup (emphasis and brackets added)." Thus, because the application describes events that occur during runtime, or during processing, or at program start up, and because the invention deals with "on-the-fly" (dynamic) generation of multimedia code for image processing, wherein the code is generated at the time it is needed (at program startup, or during runtime)
10 rather than in advance (at some time during development of the application program) the specification does indeed provide support for the claim language "generating processor-specific multimedia routines dynamically." Applicant also notes that the Examiner failed to object to amendment of the title. If the amendment to the title was not objectionable, then it follows that amendments to

Ser. No. 09/614,635

the claims should not have been objectionable either. Therefore, the rejection of the claims under 35 U.S.C. § 112, 1st paragraph is deemed to be improper.

35 U.S.C. § 102

Claims 1-3, 7-8, 11-14, 18, 19 and 21 stand rejected under 35 U.S.C. 102 (b) as
5 being anticipated by Aho *et al.* ("Aho"). To distinguish the claimed invention from the cited reference more thoroughly, Applicant amends claim 1 as below:

An apparatus for generating processor-specific multimedia routines dynamically,
comprising:

10 a computer; and

an image processing program executing on said computer, said program
including multimedia enhanced instructions for ~~processing multimedia data, said~~
~~program further including:~~

an abstract routine generator within said image processing program for receiving
15 a data stream comprising an multimedia image-processing routine that includes
multimedia enhanced instructions and for outputting a non-processor-specific abstract
representation thereof at program startup; and

a translator within said image processing program for said abstract routine
generator for receiving said abstract representation and for outputting processor-
20 specific final code translated from said non-processor-specific abstract representation
for processing multimedia input data at program startup.

Support for the amendment is found in claim 1 as it was prior to amendment.
Additional support for the amendment is found in the specification at page 1, lines 12-16;
page 3, line 13-15; page 4, lines 10-15; page 4, line 19-23; Fig. 1; page 5, line 22-page 6,
25 line 9; page 7, lines 10-11. Claim 12 is amended in similar fashion.

Aho describes a general purpose compiler. There is no teaching or suggestion in
Aho of an image processing program . . . including multimedia enhanced instructions; an
abstract routine generator within said image processing program; and a translator within
said image processing program.

Ser. No. 09/614,635

Accordingly, the rejection of claims 1 and 12 under 35 U.S.C. § 102(b) is deemed to be overcome. The dependent claims have been amended to harmonize them with the amended independents. Claims 6 and 17 have been cancelled from the Application. In view of their dependency from allowable base claims, the dependents
5 are deemed to be allowable without any separate consideration of their merits.

35 U.S.C. § 103

Claims 5-6, 10, 16, 17 and 20 stand rejected under 35 U.S.C 103 (a) as being unpatentable over Aho. Claim 6 has been cancelled from the application. In view
10 of the above amendments, the current rejection under 35 U.S.C. § 103 is deemed to be overcome.

Claims 9 and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Aho in view of "Dictionary of Computing." Applicant respectfully points out that claims 9 and 22 were cancelled in the response of April 15, 2005.

15 Claims 1-3, 7-8, 10-14 and 18-21 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Benson. The above remarks regarding Aho are equally applicable to Benson. Benson describes a compiler. There is no teaching or suggestion in Benson of an image processing program . . . including multimedia enhanced instructions; an abstract routine generator within said image processing program; and a translator within
20 said image processing program.

Therefore, the rejection of claims 1 and 12 under 35 U.S.C. § 103, and all dependents is deemed to be overcome.

Claims 4-6 and 15-17 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Benson in view of Ansari. Claims 6 and 17 have been cancelled from
25 the Application. In view of the above amendments to claims 1 and 12, the current rejection of the remaining claims is deemed overcome.

For the record, Applicant traverses the Examiner's findings concerning claims 5, 6 and 10 regarding Aho. If Official Notice is taken of a fact, the technical line of reasoning underlying a decision to take such notice must be clear and unmistakable.
30 Regarding claim 5, the Examiner merely asserts that the subject matter of claim 5 was known at the time of the invention. However, Applicant does not believe this fact to be

Ser. No. 09/614,635

- readily verifiable and therefore is not amenable to being shown by reliance on Official Notice. Applicant therefore respectfully requests that the Examiner provide documentary evidence in support of his finding. The current finding is moot with regard to claim 6, claim 6 having been cancelled from the Application. Regarding claim 10,
- 5 Applicant does not believe that it is readily verifiable that the subject matter of claim 10 was well known at the time of the invention. Therefore, Applicant respectfully requests that the Examiner provide documentary evidence in support of his finding.

Ser. No. 09/614,635

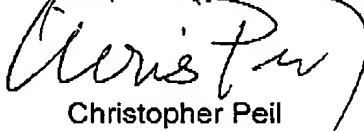
CONCLUSION

In view of the foregoing, the Application is deemed to be in allowable condition.

5 Therefore, reconsideration and prompt allowance of the claims is earnestly requested, allowing the Application to pass to issue as a United States Patent.

Should the Examiner deem it helpful, he is urged to contact Applicant's attorney at 650-474-8400.

Respectfully Submitted,


Christopher Peil
Reg. No. 45,005

Customer number 22862